

February 18, 1994

CD-94-03 (ALL)

Dear Manufacturer:

Subject: EPA Standardized Engine Family Names for the 1995 Model Year

EPA is making two changes to the engine family naming procedures discussed in our December 12, 1991 guidance letter (number CD-91-08) which become effective starting with the 1995 model year. These changes will make it possible for the EPA computer programs to assign applicable standards by default for two special cases which were not covered in the current 1994 model year naming procedures. All other aspects of the 1994 model year engine family names will remain in effect.

Under the new procedures, the meaning of codes 3, 4, 5, and 6 of the Vehicle Class field is changed. This change allows the tracking of Cold CO standards for Tier 1 heavy-light trucks.

We are adding codes L and M to the Standards Field and changing the meaning of codes A and B. This change will allow Tier 0 exhaust standards to be paired with Tier 1 particulate standards.

Enclosed with this letter is an updated Attachment 3-3 to the Data Supplement to the Application. This document explains the standardized engine family naming procedures. In particular, pages eight and eleven detail the changes.

If you have any questions about these changes please contact your team representative.

Sincerely,

Robert E. Maxwell, Director
Certification Division

Enclosures

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ATTACHMENT 3-3**EPA Standardized Engine and Evaporative Family Names**

Manufacturers must use a standardized system for identifying their individual engine families. The system suggested below was developed by EPA in 1991 to meet new regulatory requirements for 1994 and later model years.

The engine family name consists of 12 characters. The following method should be used to name engine families when data is submitted. The format of the standardized engine family name is:

Characters Description

- | | |
|-----|---|
| 1 | Model Year (see Table 1) |
| 2,3 | Letter code identifying manufacturer (see Table 2) |
| 4-6 | Displacement in liters (e.g. 5.7-the decimal point counts as a digit) or cubic inches (e.g., 350). For dual displacement families enter the <u>larger</u> displacement. For large displacement engines, the displacement may be entered as <u>XX.</u> format (e.g., 12.). Small motor cycle engines may be entered as a <u>.XX</u> format (e.g., .07). In all cases the displacement will be read in liters if a decimal point is entered and it will be read in cubic inches if there is no decimal point. |
| 7 | Vehicle class (see Table 3) |
| 8 | Fuel system and number of valves (see Table 4) |
| | Combustion cycle and fuel (see Table 5) |
| 10 | Standards (see Table 6). |
| 11 | Catalyst, Trap (see Table 7) |
| 12 | OBD or ICI (See Table 8) |

Engine/Evaporative Systems Information ESI/EvSI

TABLE 1. LETTER CODES FOR MODEL YEAR (Column 1)

Code	Year	Code	Year	Code	Year
A	1980	L	1990	Y	2000
B	1981	M	1991	1	2001
C	1982	N	1992	2	2002
D	1983	P	1993	3	2003
E	1984	R	1994	4	2004
F	1985	S	1995	5	2005
G	1986	T	1996	6	2006
H	1987	V	1997	7	2007
J	1988	W	1998	8	2008
K	1989	X	1999	9	2009

TABLE 2. LETTER CODES FOR MANUFACTURERS (Columns 2,3)

Until 1991, independent letter codes were assigned for light-duty and heavy-duty manufacturers. In several instances different codes were either used for a single manufacturer that sold both light and heavy-duty vehicles and engines or the same letter code was used for different light and heavy-duty manufacturers. This did not cause a significant problem for EPA because completely independent computer systems were used for light-duty and heavy-duty/motorcycle; however, this may have caused difficulty for non-EPA users.

In 1991, EPA combined the letter codes for light-duty and heavy-duty manufacturers and added letter codes for independent commercial testing laboratories (needed to allow EPA to identify the source of test data) and

utility engine manufacturers. The combined codes went into effect for 1994 and later model years. Whenever a letter code was used by more than one manufacturer and both manufacturers were expected to certify vehicles and engines for 1994 and later model years, it was necessary to assign a new letter code to one of the manufacturers. For this reason, several manufacturers have different letter codes for model years before and after 1994. In 1993 EPA began to define letter codes for marine engine manufacturers and government laboratories. Utility engine manufacturers were split into two categories: large off road engines and small off road engines. Manufacturers identified previously as utility engine manufacturers are still identified as utility engine manufacturers in this document; however, EPA will eventually respecify these manufacturers as large off road or small off road engine manufacturers.

Table 2 provides a list of Vehicle Information manufacturer codes and engine/evaporative family letter codes for manufacturers and laboratories that have are currently certifying or testing vehicles, engines, and motorcycles. The table identifies the type of product or service provided by each organization:

LD	-Light-duty vehicles	UE	-Utility engines
HD	-Heavy-duty vehicles/engines	SO	-Small off road engines
MC	-Motorcycles	LO	-Large off road engines
IL	-Independent testing lab.	GL	-Government laboratory
ME	-Marine engines		

-----VI Mfr				
			Manufacturer/lab Subcodes	
Code	Product	Manufacturer or laboratory	<1994	≥1994

10	LD	CHRYSLER (AMC)	AM	same
20	LD	CHRYSLER	CR	same
	HD	CHRYSLER	CC ¹	CR
30	LD	FORD	FM	same
	HD	FORD	FM	same
40		GENERAL MOTORS	GC	GC, GM ²
	LD	CPC (Chevrolet, Pontiac)	1G	1G, GM ²
	LD	BUICK-OLDSMOBILE-CADILLAC	2G	2G, GM ²
	HD	TRUCK & BUS	3G	3G, GM ²
	LD	SATURN	4G	4G, GM ²
	HD	GENERAL MOTORS	GM	GM
55	HD	DETROIT DIESEL	DD	same
67	LD	AMERICAN LIMOUSINE MFR. INC	Z6	same
68	LD	AMERICAN MUSCEL LTD	A4	same
70	LD	ASTON MARTIN	AS	same
90	LD	FIAT AUTO S.P.A.	AR	same
95	HD	AM GENERAL	AZ	same
98	LD	AURORA CARS	AA	same
101	LD	AUTOKRAFT LIMITED	AK	same
103	LD	ASC INC.	A3	same
106	LD	ALLCO EURO MOTORS	A6	same
108	LD	ROVER GROUP LTD. (AR)	AW	same
112	HD	BLUE BIRD BODY	BB	same
118	MC	BAJAJ AUTO LIMITED	BJ	same
120	LD	BMW	BM	same
	MC	BMW AG	BM	same

¹Also used by obsolete light-duty manufacturer CCC Engineering, manufacturer 139, for model years before 1994.

²The 1994 Application Format Data Supplement stated that code 'GC' would be used for 1994 and later model years; however, this code was never actually used--the division codes were used instead for 1994 and 1995. For 1996 and later, code 'GM' is used exclusively by General Motors for all engine and evaporative families.

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VI Mfr			Manufacturer/labSubcodes	
Code	Product	Manufacturer or laboratory	<1994	≥1994

123	MC	BIMOTA S.P.A.	Z8	same
126	LD	BONAIR USA	B3	same
141	LD	CHAMPAGNE IMPORTS INC.	Z5	same
143	LD	CALLAWAY	C6	same
144	MC	CAGIVA NORTH AMERICA	CG	same
146	LD	CHICAGO ARMOR&LIMOUSINE MFR CORP	Z7	same
147	LD	CCE, INC	C7	same
150	LD	CITROEN	CT ³	same
156	MC	CLASSIC MOTORCYCLES LIMITED	CM	same
157	MC	CLIFFORD GUN TRADERS & SUPPLIES	CL	same
162	LD	CONSULIER INDUSTRIES INC.	C3	same
163	LD	COLLINS PROFESSIONAL CARS. INC.	Y4	same
168	MC	CUSHMAN	CU	CH
169	LD	CX AUTOMOTIVE	CX	same
175	LD	DACIA (ARO)	DA	same
178	LD	DAEWOO	DW	same
180	HD	DAF	DT ⁴	DF
185	LD	DABRYAN COACH BUILDERS INC.	Y2	same
190	LD	DAIHATSU MOTOR COMPANY LTD.	DH	same
196	LD	DIAMOND STAR MOTORS	DS	same
197	LD	DUTCHER MOTORS INC	DT ⁵	same
200	LD	MERCEDES BENZ	MB	same
	HD	MERCEDES-BENZ AKTIENGELLSCHAFT	MB	same
201	LD	EMPIRE COACH	E6	same
204	LD,HD	US ELECTRICAR	EL	same
206	LD	DNIEPER U.S.A.	DP	same
207	LD	EXECUTIVE COACH BUILDERS	Y3	same
208	LD	ECS/ROUSH	E5	same
212	LD	EUROPEAN AUTO WERKS, INC.	E2	same
220	LD	FERRARI	FE	same
222	LD	EVANS AUTOMOBILES	E1	same
227	LD	FEDERAL COACH	F2	same
230	LD	FIAT	FT ⁶	same
241	MC	FREIGHTLINER	FR	same
243	MC	ALEX GREENSPAN T/A FIN	GA	same
244	LD	GREENWOOD AUTOMOTIVE PERFORMANCE	GW	same
246	LD	GRUMMAN ALLIED INDUSTRIES	GR	same
250	HD	HINO MOTORS	HM	same
251	LD	G & K AUTOMOTIVE CONVERSION INC	Gl	same

³Also used by heavy-duty manufacturer Caterpillar, manufacturer 730,

for model years before 1994.

⁴Also used by light-duty manufacturer Dutcher Motors Inc, manufacturer 197, for all years.

⁵Also used by heavy-duty manufacturer DAF, manufacturer 180, for model years before 1994.

⁶Also used by heavy-duty manufacturer Oshkosh Truck, manufacturer 767, for model years before 1994.

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ESI/EvSI

VI Mfr Manufacturer/lab Subcodes				
Code	Product	Manufacturer or laboratory	<1994	≥1994

253	LD	VECTOR AEROMOTIVE CORPORATION	G2	same
254	LD	GOLDACRE LTD.	G3	same
255	MC	HARLEY DAVIDSON	HD	same
258	SO	HATZ GMBH & CO KG	HZ	same
260	LD	HONDA	HN	same
	MC	HONDA	HN	same
	UE	HONDA	HN	same
265	LD	HYUNDAI	HY	same
266	LD	ICI-INTERNATIONAL	X1	same
271	LD	IMPCO	Z9	same
272	LD	IMPORT TRADE SERVICES	T1	same
285	LD	ISIS IMPORTS LTD	Z3	same
290	LD	ISUZU	SZ	same
	HD	ISUZU MOTORS	SZ	same
305	LD	JAGUAR CARS INC	JR (WAS JC)	JC
308	LD	JBA MOTORCARS INC	J1	same
314	LD	J.K. MOTORS	J3	same
331	MC	KAVULICH INTERNATIONAL	MN ⁷	M5
332	LD	KRYSTAL COACH INC.	KK	same
333	MC	KTM MOTOR	KT	same
335	MC	KAWASAKI	KA	same
338	LD	KIA MOTORS CORPORATION	KM	same
339	LD	KSK DISTRIBUTING	K2	same
344	LD	LIMOUSINE WERKS	L6	same
347	LD	LIPHARDT & ASSOCIATES INC	LP	same
350	LD	LOTUS	LT	same
352	LD	LAREDO COACHWORKS, INC	L7	same
358	MC	MATCHLESS MOTOR CYCLES	MA ⁸	M2
360	LD	MASERATI	MA ⁹	same
366	MC	MILLER SPECIALTIES	MS	same
369	MC	MOTO AMERICA	MG	same
373	LD	NORTH AMERICAL MVS	N3	same
376	LD	NEOAX	NX	same
378	MC	NEVAL MOTORCYCLES	NL ¹⁰	NY
380	LD	NISSAN	NS	same
381	HD	NISSAN DIESEL MOTOR CO.	ND	same

⁷Also used by heavy-duty manufacturer MAN NutzPahrzeuge, manufacturer 762, for all years.

⁸Also used by light-duty manufacturer Maserati, manufacturer 360, for all years.

⁹Also used by motorcycle manufacturer Matchless Motor Cycles, manufacturer 358, for model years before 1994.

¹⁰Also used by light-duty manufacturer Lamborghini, manufacturer 691, for all years.

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VI Mfr			Manufacturer/lab	Subcodes
Code	Product	Manufacturer or laboratory	<1994	≥1994

394				
MC	OMC LINCOLN		MC	same
404	LD	PRODUCTION AUTOMOTIVE SYSTEMS	P5	same
407	LD	PANOZ AUTO-DEVELOPMENT CORP	P3	same
410	LD	PEUGEOT	PE ¹¹	same
416	LD	PIERRE ENTERPRISES SOUTHEAST, INC	P5	same
420	LD	PORSCHE	PR	same
426	LD	PYRAMID COACHBUILDERS	P4	same
430	LD	RENAULT	RE	same
431	LD	PAS INC.	P2	same
432	LD	RENTECH INC.	R2	same
433	HD	RENAULT VEHICULES INDUSTRIELS	R3	same
439	LD	RAYTON-FISSORE NORTH AMERICA	R1	same
440	LD	ROLLS-ROYCE MOTORCARS LTD.	RR	same
453	MC	ROSCETTI	RC ¹²	same
454	LD	RUF AUTOMOBILE GMBH	RA	same
457	LD	ROYALE LIMOUSINE MANUFACTURERS	RL	same

460	LD	ROVER GROUP LTD.	LR	same
470	LD	SAAB	SA	same
	HD	SAAB SCANIA	SS ¹³	SA
471	LD	SAAC CAR COMPANY INC.	S6	same
472	LD	SALEEN AUTOSPORT	S3	same
473	LD	SALEEN PERFORMANCE PARTS, INC.	S8	same
475	LD	SEGUELS SERVICE INC	S2	same
481	LD	SHELBY AUTOMOBILES INC	SY	same
487	LD	SLP ENGINEERING	S5	same
490	LD	MITSUBISHI	MT ¹⁴	same
	HD	MITSUBISHI	MM ¹⁵	MT
491	LD	MITSUBISHI MOTOR SALES AMERICA	M3	same
492	LD	MITSUBISHI MOTORS AUSTRALIA LTD	ML	same
515	LD	SUPERIOR OF OHIO INC	V1	same
520	LD	EXCALIBUR AUTOMOBILE	EX	same
526	LD	TDM TECHNOLOGIES, INC.	T4	same
527	LD	THOMAS PUGH AND LINDA MCKNIGHT	T3	same
529	HD	TRANSI-CORP	T5	same

¹¹Also used for heavy-duty manufacturer Perkins Engine Company, manufacturer 770, for model years before 1994.

¹²Also used by obsolete light-duty manufactuer Replicar, manufacturer 435, for model years before 1994.

¹³Also used by obsolete light-duty manufacturer Sun Country Imports, manufacturer 541, for model years before 1994.

¹⁴Also used by heavy-duty manufacturer Mack Truck, manufacturer 760, for model years before 1994.

¹⁵Also used by obsolete light-duty manufacturer Metric Motors, manufacturer 202, for model years before 1994.

Engine/Evaporative Systems Information

ESI/EvSI

VI Mfr Code	Product	Manufacturer or laboratory	Manufacturer/lab Subcodes	
			<1994	≥1994
534	LD	SPORTS CAR AMERICA PUMA DIVISION	Z4	same
540	LD	SUZUKI MOTOR CORPORATION	SK	same
	MC	SUZUKI	SK	same
560	LD	MAZDA MOTOR CORP.	TK	same
570	LD	TOYOTA	TY	same
576	LD	NEW UNITED MOTOR MFG INC	NT	same
579	LD	UTILIMASTER CORP. OF AMERICA	Z1	same
581	MC	URALMOTO JSC	YP	same
583	LD	US TRADE CORP.	Z2	same
590	LD	VOLKSWAGEN	VW	same
600	LD	VOLVO	W	same
603	LD	WALLACE ENVIR. TESTING LAGS. INC	WA	same
605	HD	VOLVO WHITE TRUCK DIVISION	VT	same
608	LD	WISCONSIN LIFT TRUCK CORP.	WL	same
611	MC	WESTWARD INDUSTRIES	WW	same
614	LD	YUGO AMERICA, INC.	YA ¹⁶	same
615	MC	YAMAHA	YA ¹⁷	YM
640	LD	AUDI	AD	same
645	LD	AMPHI-RANGER OF AMERICA	Y1	same
660	LD	FUJI HEAVY IND	FJ	same
691	LD	LAMBORGHINI	NL ¹⁸	same
720	HD	WINNEBAGO INDUSTRIALS	WB	same

728	HD	ASQUITH MOTOR CARRIAGE CO. LTD	A7	same
730	HD	CATERPILLER	CT ¹⁹	CP
735	HD	CLARION MOTORS	CA	same
	MC	CLARION MOTORS	CA	same
740	HD	CUMMINS	CE	same
743	HD	DEERE & COMPANY	JD	same
745	HD	KLOCKNER-HUMBOLT-DEUTZ AG	DZ	same
747	HD	FLEETWOOD ENTERPRISES	FW	same
748	HD	GILLIG	GL	same
750	HD	HERCULES ENGINES	HE	same
755	HD	IVECO B.V.	VE ²⁰	same

¹⁶Also used by motorcycle manufacturer Yamaha, manufacturer 615, for model years before 1994.

¹⁷Also used by light-duty manufacturer Yugo America, manufacturer 614, for all years.

¹⁸Also used by motorcycle manufacturer Neval Motorcycles, manufacturer 378, for model years before 1994.

¹⁹Also used by light-duty manufacturer Citroen, manufacturer 150, for all years.

²⁰Also used by obsolete light-duty manufacturer Village Emission Research Inc, manufacturer 594, model years before 1994.

Engine/Evaporative Systems Information ESI/EvSI

VI Mfr			Manufacturer/lab	Subcodes
Code	Product	Manufacturer or laboratory	<1994	≥1994

760	HD	MACK TRUCKS	MT ²¹	MK
762	HD	MAN NUTZPAHRZEUGE	MN ²²	same
765	HD	NAVISTAR INTERNATIONAL TRANS.	NV	same
767	HD	OSHKOSH TRUCK	FT ²³	S7
770	HD	PERKINS ENGINE COMPANY	PE ²⁴	PK
775	HD	ROADMASTER	RM	same
793	HD	TRANSPORTATION MANUFACTURING COR	T6	same
795	HD	VIRONEX	VX	same
802	UE	ANDREAS STIHL	A8	same
805	UE	BRIGGS & STRATTON	BS	same
825	UE	KIORITZ	EH	same
828	UE	GENERAC	GN	same
835	UE	HOMELITE TEXTRON	H2	same
838	UE	HUSQVARNA AB	HV	same
840	UE	INERTIA DYNAMICS CORP.	N4	same
845	UE	KOHLER COMPANY	KH	same
847	UE	KOMATSU ZENOAH AMERICA	KZ	same
849	UE	KUBOTA	KB	same
850	UE	LAWN-BOY	L4	same
852	UE	LISTER PETTER, INC.	L5	same
854	UE	MARUYAMA U.S. INC	M4	same
855	UE	MCCULLOCH CORP.	MH	same
860	UE	NELSON	NE	same
865	UE	ONAN CORP	N5	same
868	UE	POULAN/WEED EATER	PW	same
869	UE	SHINDAIWA	SW	same
870	UE	TECUMSEH PRODUCTS	TP	same
871	UE	TANAKA KOGYO CO LTD	T7	same
872	UE	TELEDYNE TOTAL POWER	T2	same
885	UE	YANMAR DIESEL ENGINE USA	YD	same
890	UE	WACKER CORP.	W1	same
901	IL	AUTOMOTIVE TESTING LABS, INC	01	same
902	IL	ECS LABORATORIES INC.	02	same
903	IL	ENVIRONMENTAL TESTING CORP.	03	same
904	IL	LUCAS ENGINE MANAGEMENT SYSTEMS	04	same
905	IL	ENVIRONMENTAL RESEARCH & DEV. CO	05	same
906	IL	NORTHERN CAL. EMISSIONS LAB.	06	same
907	IL	TESTING SERVICES INC.	07	same
908	IL	COMPLIANCE & RESEARCH SERVICES	08	same
909	IL	AUTOMATED CUSTOM SYSTEMS, INC.	09	same

²¹Also used by light-duty manufacturer Mitsubishi, manufacturer 490, for all years.

²²Also used by motorcycle manufacturer Kavaulich International, manufacturer 331, for model years before 1994.

²³Also used by light-duty manufacturer Fiat, manufacturer 230, for all years.

²⁴Also used by light-duty manufacturer Peugeot, manufacturer 410, for all years.

Engine/Evaporative Systems Information

ESI/EvSI

VI Mfr		Manufacturer or laboratory	Manufacturer/lab Subcodes	
Code	Product		<1994	≥1994

910	IL	CALIFORNIA ENVIRONMANTAL ENG.	10	same
911	IL	EAGLE PITCHER AUTOMOTIVE GROUP	11	same
912	IL	TICKFORD LIMITED	K3	same
920	GL	COUNTRY OF SWEDEN	SG	same
980	GL	CALIFORNIA AIR RESOURCES BOARD	80	same
991	GL	EPA CD	91	same
992	GL	EPA EOD	92	same
993	GL	EPA MOD	93	same
994	GL	EPA FOSD	94	same
995	GL	EPA ECTD (obsolete)	95	same
996	GL	EPA RDSD	96	same
997	GL	EPA EPSD	97	same

